tion[1]. The heat index for *o Ceti* from the observation on December 6, 1921, was 7.7 mag.

The exceptionally large heat index for *α Herculis* which is in agreement with the observations of Coblentz[2] indicates that it radiates as a star of somewhat later spectral type than that usually assigned to it.

EDISON PETTIT,
S. B. NICHOLSON.

INTERFEROMETER OBSERVATIONS OF STAR DIAMETERS

Observations of stellar diameters made before July 14, 1921, were given in the August, 1921, number of these Publications. Additional measures have since been made on many stars, the greater part of the program being devoted to the calibration of the interferometer beam by means of early type stars having small diameters. Dr. Michelson and the writer will publish provisional results for a dozen stars as soon as adjustments have been made for the troublesome factors of seeing and magnitude.

The values for *Antares* and *Arcturus* remain as published before. *Aldebaran* has shown fringes up to the end of the beam and it is estimated their disappearance would take place in the neighborhood of 22 feet. *Betelgeuse* this season has shown no fringes beyond 8¼ feet. As compared with previous observations this might suggest an increase in its apparent diameter, possibly related to the variability in brightness of the star. The quality of the seeing, however, has been poor and no decision can be reached until further measurements have been made.

F. G. PEASE.

Mount Wilson Observatory, May 9, 1922.

SUMMARY OF MOUNT WILSON MAGNETIC OBSERVATIONS OF SUN-SPOTS FOR MARCH AND APRIL, 1922

During the last few months several groups with irregular polarity have been observed. Usually the few groups with reversed polarity have been small and unstable but recently some of these have been medium sized spots, stable and of average duration. In view of the approaching minimum this tendency toward reversal is of especial interest.

In March two complex groups, Nos. 1951 and 1953, were both visible on several days. To have two of this type present

[1] *Publ. A. S. P.*, **34**, 133, 1922.
[2] *Lick Observatory Bulletin*, **8**, 104 (No. 266), 1914.

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR MARCH, 1922

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1945	Feb. 24.2	— 6	23	αp														
1946	28.2	+ 7	19	βp	αp	αp												
1947	Mar. 1.5	+13	17	α	x													
1948	1.3	+11	26	βf	βf	βf	βf	βf	αf	x								
1949	2.0	+ 8	29	β	β	β	β	β	β	β	x							
1951	6.7	+13	31	x	γ	γ	γ	γ	γ	γ	γ	γ	x		x			
1952	7.1	+ 7	8				αf	β	β	βf								
1953	11.5	— 5	26					x	γ	γ	γ	γ	x		x	γ	γ	αp
1954	12.5	+ 8	20									x	x		x	αp	αp	αp
1955	8.5	—18	x												x	x	x	
				6	5	4	4	5	5	5	3	3	3	—	4	3	3	2

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1956	Mar. 14.2	—12	x		x	x	x	x											
1957	28.5	+ 8	25								x	x	x		αp		αp	αp	
1958	27.8	+ 9	20								x	x	x		βp		x	βp	
1959	29.9	+ 7	20									x	x		α		α	α	
1960	Apr. 2.6	+10	27														α	α	
				—	1	1	1	1	0	0	2	3	3	—	3	—	4	4	—

NOTES

No. 1951. A return of No. 1943.

No. 1953. A return of No. 1944. This was its fourth return. On March 15 an invisible spot of negative polarity was observed in the following part of the group where a small spot had been visible on the previous day.

No. 1954. A negative spot located in the preceding part of the calcium flocculi and therefore of irregular polarity.

No. 1959. A negative spot. This spot was in the central part of the calcium flocculi but the nature of the flocculi was such that the classification as α or αf is somewhat uncertain.

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR APRIL, 1922

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1957	Mar. 28.5	+ 8	25	*ap*	*ap*													
1959	29.9	+ 7	20	*a*	*a*	*x*												
1960	Apr. 2.6	+10	27	*a*	*a*	*a*			*x*	*x*								
1961	6.1	+10	14	*βp*	*βp*	*βp*			*x*	*x*								
1962	3.4	+ 8	*x*		*ap*	*x*												
1963	1.9	+10	4		*βp*	*a*												
1964	2.5	+ 5	2			*af*												
				4	6	6	—	—	2	2	—	0	0	0	0	0	0	0

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1965	Apr. 26.1	+ 7	12							*ap*	*β*	*β*	*βp*	*β*	*β*	*β*	*βf*	*ap*
1966	29.7	+ 6	17									*x*	*ap*	*βp*	*βp*	*βp*	*ap*	*ap*
1967	May 3.0	+ 9	25														*af*	*βf*
				0	0	0	0	0	0	1	1	2	2	2	2	2	3	3

NOTES

No. 1965. A return of No. 1959.
No. 1962. A small spot or faint marking of negative polarity.

at the same time is very unusual. March was the most active month since last July with a daily average of 3.0 groups and with but two spotless days. During April there were thirteen consecutive spotless days, which was the longest completely quiescent period since the time of the last minimum. The average number of groups observed daily during April was 1.4.

Groups No. 1948 and 1949 were of especial interest because of the coalescence of the following member of No. 1948 with the preceding member of No. 1949. On March 2, both spots were large and although close together were still distinctly separate. The following member of No. 1948, of negative polarity, was north and slightly west of the preceding member of No. 1949 which was of positive polarity. By March 3 these two spots had coalesced so that they appeared as a single spot with large irregular penumbra and several umbræ, the northern umbræ being negative and the southern positive. This formation remained practically unchanged until the groups disappeared around the west limb. On account of their earlier appearance the classification as two groups was maintained although after March 3 the following member of No. 1948 and the preceding member of No. 1949 were different parts of the same spot.

GENERAL NOTES

Percival Lowell. "An Afterglow" by Louise Leonard, (A Review):*—In proportion as we acquire a more profound and intelligent knowledge of history, we should accord an even larger place to the study of men and their work—through written biographies. The volume "An Afterglow," while it is not a biography in the technical sense, fulfills a want and occupies a place unique in the literature of the history of astronomy.

To review a biographical study of a man whom one knows only by his work and writing, is quite a distinct task from reviewing that of a man whom one knows personally. The reviewer in this case did not know Lowell personally, but did know of his work and of its worth to the scientific world. He occupies an epoch-making place in astronomical history.

The book "Afterglow" reveals to us a life more fascinating than is usually bequeathed to mortal man. Few men of wealth would care to do what Lowell did. Astronomy, to Lowell, was

*163 pages—Boston, Pub. by Richard C. Badger, 1921.